Claims

1. Method for recording a data stream on a storage medium, wherein said data stream is recorded in data blocks (B0, B1,...), characterized in the following steps:
   - generating an error correction block (P) for one or more data blocks;
   - writing said error correction block (P) on said storage medium during recording;
   - keeping a spare data area (S) on the storage medium blank;
   - reconstructing a defect data block (D) using said error correction block (P); and
   - storing said reconstructed data block in said spare data area (S).

2. Method according to claim 1, wherein said data block reconstruction is performed after finishing recording of the data blocks.

3. Method according to claim 1 or 2, wherein said error correction block is a parity block that covers one or more data blocks.

4. Method according to claim 3, wherein an additional parity block (PGE, PGO) covers several groups of data blocks and parity blocks.

5. Method according to any of the preceding claims, wherein said storage medium is an optical disk having one or more tracks (T), which are written and read-out using an optical pickup.

6. Method according to claim 5, wherein reconstructed data block are stored in spare data areas (S) close to the defect data block (D) in order to allow replacement

of the defect data block with the reconstructed data block with fast jumps of the optical pickup from one track to the other or even without jumps by buffering these spare areas during playback.

7. Method according to any of the preceding claims, wherein a reconstructed data block is stored in a spare data area (S) approximately located at the geometrical opposite of the defect block on the optical disk.

8. Method for playing back a recorded data stream from a storage medium, wherein said data stream has been recorded in data blocks (B0, B1,…), characterized in the following steps:

- reading payload blocks and a replacement block for a defect payload block (DB7);
- recovering the defect block (DB7) by using the read replacement block;
- skipping the already read blocks; and
- continuing the reading of not yet read payload blocks.

9. Method according to claim 8, wherein the payload blocks are read until the defect block (DB7) is detected and wherein after detection of the defect block (DB7) it is jumped back to the replacement block of the defect payload block (DB7) and the replacement block is read.

10. Method according to claim 8, wherein the replacement block is read and buffered and further payload blocks are read until the defect block (DB7) is detected.

11. Method for according to claim 8, wherein the read payload blocks are buffered and wherein a defect block (SDB6) is skipped and the following payload blocks and parity block are read and buffered and wherein the defect payload block is reconstructed by using the buffered

blocks and the parity block.

12. Method according to any of the preceding claims, wherein said block is a cluster for a Blu-ray Rewritable Disc.

13. Apparatus for performing a method according to any of the preceding claims.